

ABSTRACT

Substantially avirulent forms of atypical porcine reproductive and respiratory syndrome (PRRS) virus and corresponding vaccines are provided which result from cell culture passaging of virulent forms of PRRS. The resultant avirulent atypical PRRS virus is useful as a vaccine in that PRRS specific antibody response is elicited by inoculation of host animals, thereby conferring effective immunity against both previously known strains of PRRS virus and newly isolated atypical PRRS virus strains. The preferred passaging technique ensures that the virus remains in a logarithmic growth phase substantially throughout the process, which minimizes the time required to achieve attenuation. The present invention also provides diagnostic testing methods which can differentiate between animals infected with field strains and attenuated strains of PRRSV.